**CLAIMS:** 

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- 1. An electronic circuit that includes at least one sequential logic element (12) that comprises:
- at least one clock terminal for receiving a clock signal (CLK);
- at least one input terminal (D) for receiving an input signal (I);
- at least one output terminal (Q) for providing an output signal (O); characterized in that said electronic circuit further comprises:
  - circuitry (20) for monitoring said input and output signals (I, O) to provide a control signal (CS) in response to said input and output signals (I, O); and means for controlling a power consumption of the electronic circuit in response to said control signal (CS).
  - 2. An electronic circuit as claimed in claim 1, characterized in that it is capable of being controlled at a rate determined by the clock signal (CLK).
- 15 3. An electronic circuit as claimed in claims 1 or 2 characterized in that it is capable of providing information relating to future power consumption.
- An electronic circuit as claimed in any of the preceding claims, characterized by its ability of having future power consumption being controllable in advance based upon past logical events.
  - An apparatus that includes an electronic circuit as claimed in claim 1.
- 6. A method of controlling power consumption of an electronic circuit that includes at least one sequential logic element (12) that comprises:
  - at least one clock terminal for receiving a clock signal (CLK);
  - at least one input terminal (D) for receiving an input signal (I);
  - at least one output terminal (Q) for providing an output signal (O); characterized in that the method comprises the steps of:

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monitoring said input and output signals (I, O);

providing a control signal (CS) in response to the input and output signals (I,

O); and

operatively controlling the power consumption in response to the control

5 signal.